



Analysis

Communication

PREVENTING

Jail Crowding

A PRACTICAL GUIDE

Policies & Practices

Coordination

SECOND EDITION

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Preventing Jail Crowding: A Practical Guide

Second Edition

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Understanding the Sources of Jail Crowding

Try to visualize a line graph: one line sloping downward, the other sloping upward. The first line represents the decline in offenses reported to local law enforcement, and the other represents the growing number of people in the county jail. The graph illustrates the divergence of two trends.

We all agree that the number of people in jail is a consequence of the level of criminal activity taking place in the community. But that does not fully explain the situation in jurisdictions where measures of the level of crime have been declining, yet the jail population continues to increase.

In these jurisdictions, the increased number of people in jail is also a consequence of changes in the response of officials who operate the local justice system: local law enforcement, prosecutors, probation and parole officers, and judges.

These changes can be thought of as changes in justice policies and practices. They may be stated or unstated, obvious or subtle. Empirically, they show up as changes in decisionmaking. These changes in decisionmaking can be detected at key justice system decision points that mark the passage of an individual or a case through the justice system process (e.g., at the decision to arrest and the decision to place an arrestee in detention, case filing, or sentencing).

Although they work independently, as these officials make decisions at these key justice system decision points they collectively operate the levers and controls that regulate the size of the jail population. Note that the changing policies and practices of these officials lie mostly outside jail operations. The sheriff, or the jail administrator, has little control over who goes into jail, how long people stay there, or how they get out.

Understanding the Dynamics That Create Changes in Jail Occupancy Levels

Preventing and/or managing crowding requires a basic understanding of the jail population dynamics that determine how many people are in a jail. This understanding comes from examination of a basic jail population analysis formula that shows the admission rate and inmate length of stay determine the number of people in jail:

Number of admissions $\times$ average length of stay =
number of jail days required.

Two additional calculations may be derived from this basic formula:

Number of jail bed days required $\div$ 365 days per year =
average daily jail population.

Total number of jail days required $\div$ number of admissions =
average length of jail stay.*

Changes in the number of admissions or length of inmate stay will change the number of people in jail on any given day. A jail crowding crisis can result if both increase at the same time.

An example will help illustrate this important formula. Let us say that, on average, 10 people are admitted to a hypothetical local jail each day, and the average length of inmate stay is 15.0 days. As we start this exercise, the midnight inmate count at the end of the day on January 10 confirms that 100 people are in jail.

Consider the following scenarios.

Scenario 1: Stable state

If 10 people are admitted to jail on January 11 and exactly 10 people are released on January 11, the midnight inmate count at the end of January 11 will remain the same as it was at the end of January 10. This stable

* This calculation will best represent the average length of stay if the number of releases roughly approximates the number of admissions.

state will occur if the number of admissions exactly matches the number of releases. The jail occupancy level will remain unchanged as a result.

Scenario 2: Admissions increase

If 20 people are admitted to jail (10 more than normal) and only the usual 10 people are released, there will be 110 people in jail at the end of the day on January 11. This is an increase of 10 inmates. It is easy to see how more admissions can increase the number of people in jail and eventually produce jail crowding.

Scenario 3: Length-of-stay increase

If 10 people are admitted to jail on January 11 and only 1 person is released that day, the total inmate count will swell to 109 inmates. The number of admissions did not change, but fewer people were released than usual. Fewer releases *always* mean that inmates are staying longer than before. This scenario shows how longer inmate stays will increase the number of people in jail. (Conversely, shorter stays will work to reduce the number of people in jail.)

The length of inmate stay is a very important, but less understood, determinant of the number of people in any jail. Many jail administrators can quickly produce detailed information about their number of admissions, often with additional details about arresting agency, charges, and so forth. Yet, it is much harder to find jail administrators who can produce length-of-stay information for these same classes of prisoners.

Scenario 4: Both change

What happens when scenario 2 and scenario 3 combine—in other words, when there is an increase in admissions *and* an increase in the length of inmate stay? Using our example, we can see that the increase in admissions would produce 10 additional inmates at the end of the day. Furthermore, the increase in the inmate length of jail stay would produce nine additional inmates. As a result, the total inmate count would swell from 100 to 119 inmates (10 from an increase in admissions and 9 from an increase in the

inmate length of stay). Thus, the most difficult situation, from a jail population management perspective, is when *both* the numbers of admissions and the inmate length of stay are increasing. This is when the jail population will increase most rapidly.

Explaining Swings in Jail Occupancy Levels

It is precisely in these times of crisis that the sheriff and/or the jail administrator will be expected to answer some basic questions: Who is in jail? Why has the jail population been increasing? Why is the jail crowded? Typically, the people responsible for answering these questions do not do a very good job. This is because they simply do not have sufficient information to do so. Difficulty in answering even simple questions can undermine public confidence in the ability of the jail administrator and/or sheriff to understand and manage the situation.

It isn't that they are not trying. The interaction of the admission and length-of-stay variables can be complicated. These interactions are not easy to understand. Many computerized jail information systems seem to be unable to create the kinds of reports that are needed. And, if done manually, time is needed to pull the booking jackets, collect the data by hand, analyze the data, and prepare a report. Even then, the report may contain insufficient information to answer some of the questions that will be asked. For example, it may not contain information that will confirm or discredit some of the hypotheses (guesses) others will set forth to explain changes in jail population levels. Thus, the analysts must return to the data, conduct additional analyses, and repeat the process.

By the time a written report can be presented, additional changes in admission and release rates may be taking place. The situation keeps changing. Analysts are always shooting at a moving target. It is difficult to create a clear picture of the situation. Rather, the process seems to go in circles. This can gradually erode confidence in the department's ability

to analyze the situation. As a consequence, there is little enthusiasm for proposed courses of action because too many people are unsure that these are the appropriate remedies. The result is inaction.

Fortunately, there is an alternative.

A Jail Population Analysis System

It is possible for any jail to set up a data collection and analysis system that will describe these changes in admissions and lengths of stay, show how they combine, and explain why and how the jail population is rising and falling. Essential and optional data elements that could produce a very basic jail population analysis are listed below.

Essential data elements include the following:

- Person identifier (number unique to the person).
- Booking event number (number to identify the jail admission).
- Sex (identification of gender).
- Booking date (date inmate was admitted to the jail).
- Booking time (military time inmate was admitted).
- Release date (date inmate was released from jail).
- Release time (military time inmate was released).
- Release type (bail, release on recognizance, acquittal, escape, etc.).

Optional data elements include the following:

- Arresting agency (agency making arrest; not transport).
- Sentence status (sentenced on all charges, partial, none).
- Offense level (felony, misdemeanor, infraction, etc.).
- Court jurisdiction (court of jurisdiction).

These data should be collected on every person in the jail at a specific date and time (e.g., at a midnight inmate count). Thereafter, the same data should be collected for anyone who enters or leaves the jail. The data for each inmate would appear as a row on a spreadsheet or in a database. Conceptually, it is like creating a checkbook where the checkbook

balance represents the daily population count, the deposits represent admissions, and the checks written represent releases: it is a crude equivalent of a Quicken-type program for corrections.

Every jail keeps some sort of record of jail admissions and releases. This means that every jail already has the basic data needed to begin building a jail population analysis system. No additional data may be needed.

Data collection starts with recording the date, time, and identifying information for every person who enters or leaves the jail. Normally, additional information also will be available from records kept at the jail or in the local information system. For example, admission records may identify the arresting agency, the arresting agency charges, and so forth. And, in addition to release date and time, there may be some record of the type of release (e.g., bail bond, release on recognizance, dismissal, or acquittal in court).

Using only the data elements labeled “essential” on page 5, a jail administrator could begin with the jail population on January 1, 2001, and show how changes in the number of admissions and/or length of stay added to or subtracted from the population over the following months. This would permit the jail administrator to determine how much of the change was due to an increase in admissions and how much was due to a change in the average length of inmate stay.

If additional details are also in the database (see the data elements labeled “optional” on page 5, the administrator could “drill down” into the database to analyze components of the jail population. This will help determine whether the change can be attributed to some subset of inmates. For example, is the change concentrated in male inmates or female inmates, in inmates being arrested by a particular agency or for a particular offense, or in inmates who are being processed in a particular court?

The example report on page 7 displays partial results of such an analysis for inmates in custody on a given day. Monthly reports of this type can be compared to show changes in jail composition. Similar tables can be

Example Report of Jail Utilization and Occupancy

Sentence Status	Number of Inmates	Percentage of Inmates	Hours in Custody	Percentage of Hours	Average Stay (in hours)
Felony sentenced	156	26.5	370,865	26.8	2,377
Felony unsentenced	184	31.2	847,229	53.0	4,605
Misdemeanor unsentenced	119	20.2	248,419	15.5	2,088
Misdemeanor sentenced	125	21.2	111,898	7.0	895
Other sentenced	4	0.6	15,985	0.1	3,996
Other unsentenced	1	0.2	4,150	0.3	4,150
Totals	589	100.0	1,598,546	100.0	2,714
Offense Levels					
Felony	340	57.7	1,218,094	76.2	3,583
Misdemeanor	244	41.4	360,317	22.5	1,477
Other	5	0.8	20,134	1.2	4,027
Totals	589	100.0	1,598,546	100.0	2,714

created to show changes in bookings and/or releases over various time periods. The report format essentially will be the same.

Some jails do not have automated recordkeeping systems. Fortunately, these tables can be constructed using manually maintained booking and release logs as source information. The data first must be entered into a desktop computer and then can be analyzed with commonly available, widely used spreadsheet programs.

Where this information is already in a computer, the task is to set up a daily download of existing data. No new data collection should be necessary.

Modeling jail population management options

Once this basic jail population analysis capability is established, it can be used to begin modeling the results of hypothetical or actual changes in admissions or lengths of stay. Hypothetical changes may be labeled “defensive,” as in the case of a crowded jail that seeks to find ways to reduce the size of the inmate population. Or, changes may be labeled “proactive.” For example, officials may seek to make more effective use of jail bed space by deliberately changing the composition of the jail population to keep some people longer and move lesser offenders to other corrections options.

We begin with an example to illustrate how a defensive-type change would work:

Let us assume that our hypothetical jail has 100 inmates and that the jail is full at the start of our exercise. This would mean that the public protection resource available to the community is $100 \text{ beds} \times 365 \text{ days a year} = 36,500 \text{ jail bed days}$. This figure (36,500 jail bed days) represents the available public protection resource.

If the average length of inmate stay is 15.0 days, then 2,433 inmates can be housed during the year ($36,500 \text{ jail bed days} \div 15.0 \text{ average days' stay} = 2,433 \text{ inmates}$). The bed space requirement would change if either the number of admissions or the length of stay were reduced. For example, let's say both the number of admissions and the length of stay could be reduced by 10 percent.

How would a 10-percent reduction in both the numbers of admissions and the length of inmate stay affect the inmate count? The results of the exercise are as follows:

- Reduction in number of admissions: (10 percent of 2,433 inmates housed during the year = 243 inmates) $\times 15.0 \text{ average days' stay} = 3,645 \text{ jail bed days}$. This translates into a bed saving of 10 beds ($3,645 \text{ jail days} \div 365 \text{ days} = 9.98 \text{ beds}$).

- Reduction in inmate stays: (10 percent of 15.0 days = 1.5 days). This reduces the average length of inmate stay from 15.0 to 13.5 days, which translates into a bed savings of 10 beds (1.5 days' stay × 2,433 inmates = 3,650 fewer jail bed days). And 3,650 fewer jail bed days divided by 365 days per year = 10 beds.

The combined result can be estimated as follows:

- Previous number of inmates that could be housed 2,433
- 10-percent reduction in admissions -243
- New number of admissions (90 percent of previous) 2,190
- New length of stay = 13.5 days. A 13.5-day inmate stay × 2,190 inmates = 29,565 jail bed days, divided by 365 days in the year = jail population of 81 inmates. This means the jail population would be reduced to 81 inmates versus 100 inmates before these reductions.

Reducing the Inmate Population in a Crowded Jail

Our example also illustrates how officials might reduce the number of inmates in a crowded jail. Suppose a local jail has only 81 beds but is crowded and has an average daily population of 100. The previous example shows how the inmate population can be reduced to 81 inmates through the achievement and continuous management of a 10-percent reduction in admissions and average length of stay.

Policy Choices

Any actual implementation of this idea would not use an arbitrary 10-percent reduction for either admissions or length of inmate stay. Analysis of the type and source of admissions and types of jail releases should inform action. Each situation will be different. Some jurisdictions may find more possibilities to manage the admission rate but may

find fewer possibilities for managing the length of stay. Other jurisdictions may discover just the opposite.

Some jurisdictions might want to incapacitate fewer inmates but increase the length of stay of more serious cases. This would be an example of a proactive strategy. To do this, they would reduce the number of admissions and increase the length of stay. The total number of jail bed days might remain unchanged yet produce improved public protection.

Other jurisdictions might seek to achieve improved public protection by doing just the opposite (that is, by increasing the number of admissions but reducing the average length of jail stay). They may or may not wish to change the total number of jail bed days that are being provided.

These are only a few examples of how a jail population analysis capability might be put to work first to prevent and then to better manage jail population occupancy levels in a city or county jail. These are all examples of jail population *management*, a responsibility that springs from the belief that jail bed space needs to be managed in a way that maximizes community protection. In too many jails, the size or composition of the jail population is not determined by deliberate, well-thought-out, coordinated decisionmaking. The jail population is left to seek its own level.

The Key to Preventing Crowding

The key to preventing crowding, and to managing the jail population, is to continuously collect, monitor, and analyze admission and length-of-stay information, then to share the results with other justice officials and with officials in leadership positions in general government. Their cooperation will be essential. Collectively, they control the policies and practices that determine jail admissions and length of stay. As noted earlier, these levers and mechanisms lie outside the control of the jail administrator and/or the sheriff.

For this reason, the sheriff and the jail administrator have a stake in forming a justice system-wide criminal justice coordinating committee (CJCC), or in strengthening an existing CJCC that is not operating well. This is a forum at which the sheriff can demonstrate that potential or actual jail crowding is a justice system dysfunction: it is not simply “the sheriff’s problem.” (For more information, see *Guidelines for Developing a Criminal Justice Coordinating Committee* by Robert C. Cushman.)

These officials have a large stake in ensuring the jail bed resource is best used to maximize public protection. When they are presented with clear and convincing empirical evidence, they will do what they can to modify their policies and practices. Jail administrators and/or sheriffs can exert a great deal of influence on the decisionmaking of these other agencies. But they can do so only if they have the facts, if they can competently answer questions about how the jail population is changing, and if they can clearly demonstrate how changes in admission rates or lengths of stay can improve the administration of justice. (More information is provided in the resources listed below.)

This approach will also serve the community well when it is time to build a new jail. Officials will be more informed and more supportive. They will be able to help the community understand that jail bed space is being used wisely. The general public will not support efforts to expand jail bed space until it is convinced that all potential excess has been squeezed out of the existing operation.

Resources

Cushman, Robert C., *Guidelines for Developing a Criminal Justice Coordinating Committee*, Washington, DC: National Institute of Corrections, January 2002, NIC accession number 017232.

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Pretrial Services Resource Center, *A Second Look at Alleviating Jail Crowding—A Systems Perspective*, Washington, DC: U.S. Department of Justice, Bureau of Justice Assistance, October 2000, NCJ 182507.

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